

November’s weather struggled to live up to the level of excitement provided by October’s historic cold snap and ice storm, although it had its moments. Following that burst of moisture just before Halloween, some areas of the state went more than a month without seeing at least a quarter inch of rain in a single day. Other areas saw Oklahoma’s weather at its worst, however. Storms on the 24th brought severe weather back to the state with damaging winds and hail up to the size of golf balls. At least two tornadoes touched down that day in southeastern Oklahoma. The first struck near Kinta in Haskell County around 9 p.m., destroying a mobile home and damaging other structures. The second came about an hour later near Spiro in Le Flore County and damaged a barn. The November tornadoes brought the unofficial 2020 total to 39 according to preliminary data from the National Weather Service, well below the 1951-2019 annual average of 57.4, and dwarfed by 2019’s record total of 149. This year’s tally would also mark the state’s lowest since 2009’s 34 confirmed twisters.

autumn on record. The first 11 months of the year were the 35th warmest on record with a statewide average of 62.4 degrees, 0.6 degrees above normal.

The statewide average precipitation total, as measured by the Mesonet, was 1.39 inches below normal at 1.12 inches. That ranks the month as the 37th driest November on record. Only three of the Mesonet’s 120 sites finished with above normal precipitation for November: Beaver, 1.08 inches; Burbank, 2.23 inches; and Foraker at 2.63 inches. Miami actually led the state with 3.44 inches, but that total still fell below their November normal of 4.13 inches. Arnett brought up the rear with 0.24 inches, and 60 other Mesonet sites failed to receive at least an inch for the month. Deficits were generally around an inch, although areas of east central and southeastern Oklahoma fell 2-3 inches below normal. The fall average total of 8.6 inches was 0.98 inches below normal

November 2020 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	86°F	Arnett, Goodwell	19
Low Temperature	12°F	Hooker	30
High Precipitation	3.34 in.	Miami	--
Low Precipitation	0.24 in.	Arnett	--

According to preliminary data from the Oklahoma Mesonet, the statewide average temperature was 53 degrees to rank as the 10th warmest November since records began in 1895, 3.7 degrees above normal. November was also the first month since June to finish warmer than normal statewide. The month’s lowest reading of 12 degrees – also the lowest for the season thus far – was reported at Hooker on the 31st. The Mesonet recorded a slew of 70s and 80s during the month, including November’s highest reading of 86 degrees at both Arnett and Goodwell on the 19th. The warm November somewhat offset the cooler than normal September-October period, but the climatological fall (September-November) still finished 0.6 degrees below normal with an average of 60.2 degrees, the 41st coolest

November 2020 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2020)
Month (November)	53.0°F	3.7°F	10th Warmest
Season-to-Date (Sept-Nov)	60.2°F	-0.6°F	41st Coolest
Year-to-Date (Jan-Nov)	62.4°F	0.6°F	35th Warmest

Precipitation

	Total	Depart.	Rank (1895-2020)
Month (November)	1.12 in.	-1.39 in.	37th Driest
Season-to-Date (Sept-Nov)	8.60 in.	-0.98 in.	59th Wettest
Year-to-Date (Jan-Nov)	36.78 in.	2.34 in.	27th Wettest

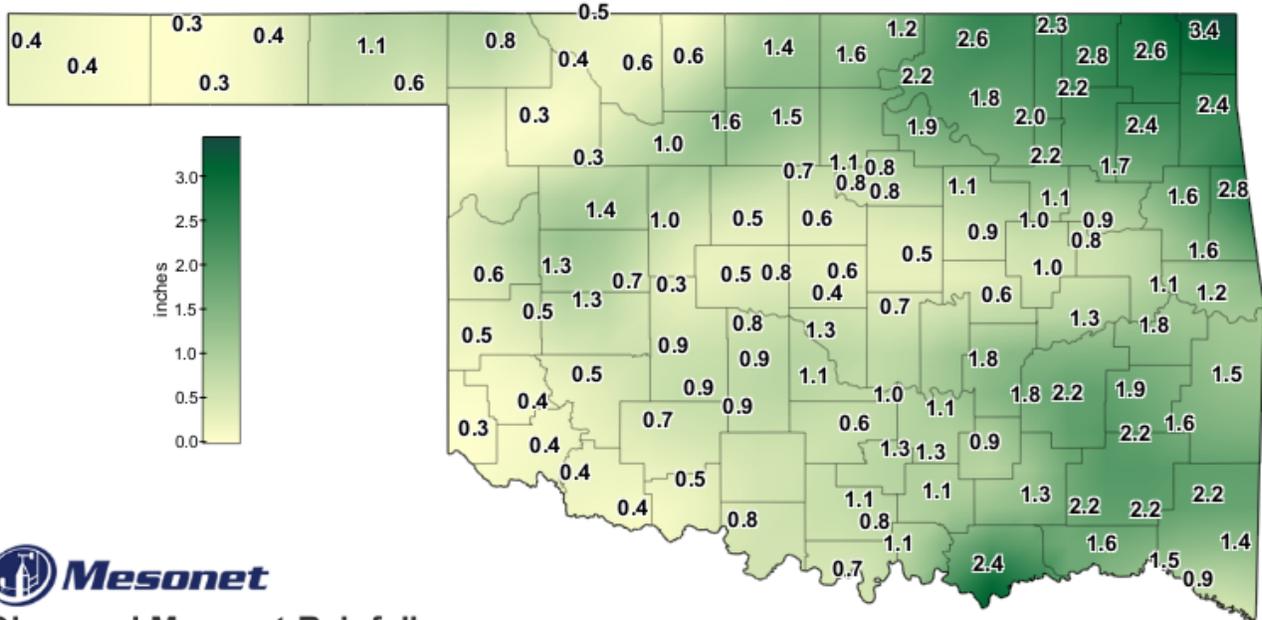
Depart. = departure from 30-year normal

to rank as the 59th wettest on record. Deficits of 4-6 inches were isolated in parts of far southwestern, southeastern, and east central Oklahoma. Otherwise, amounts were either close to or within 2-3 inches of normal. The first 11 months of the year finished 2.34 inches above normal at 36.78 inches across the state, the 27th wettest January-November on record. There was a stark difference in moisture totals across

the state, however, with deficits of up to 11 inches for that period in the southwest to surpluses of nearly 18 inches in east central Oklahoma.

Drought coverage dropped from 34% of the state at the end of October to 11% after the first two weeks of November. The prolonged dry weather resulted in an increase to 25% coverage at the end of November. The December outlooks from the Climate Prediction Center (CPC) indicate increased odds of above normal temperatures and below normal precipitation across the entire state. Despite those possible outcomes, CPC's December drought outlook does not see further drought development as likely during December.

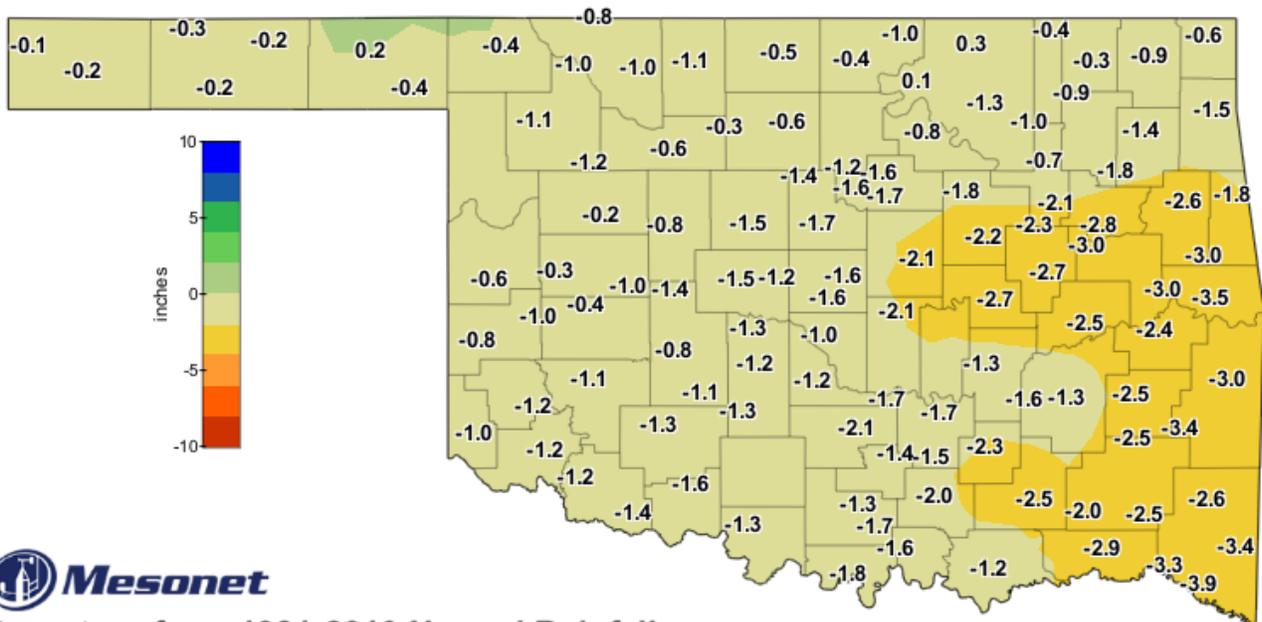
NOVEMBER 2020 OBSERVED PRECIPITATION



Observed Mesonet Rainfall
Calendar Month to Date

Nov 1, 2020 through Nov 30, 2020
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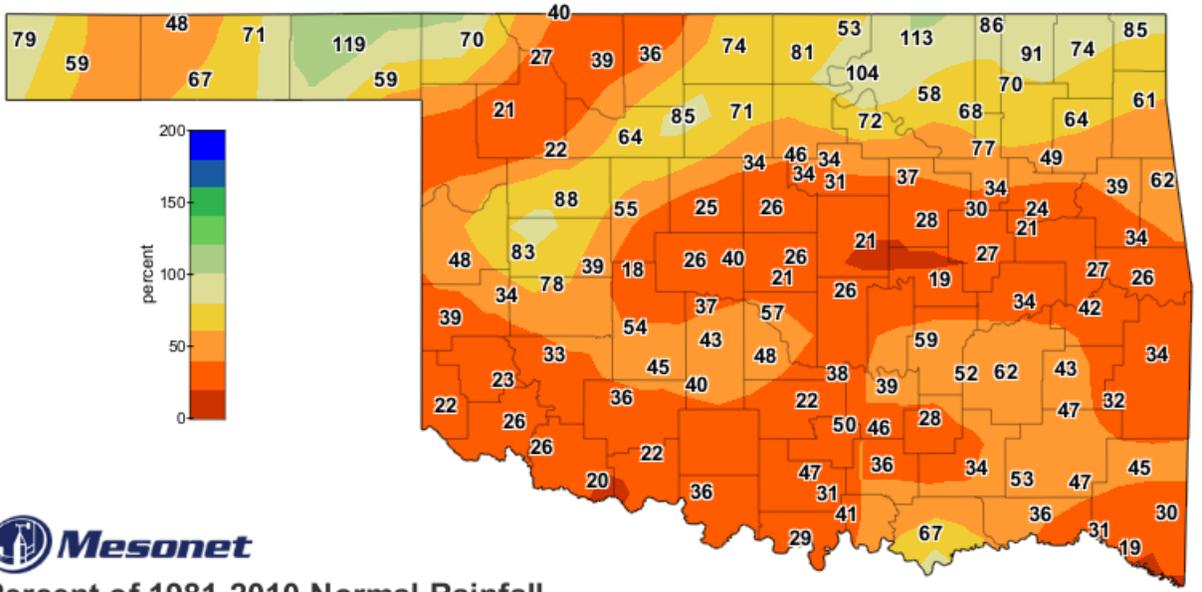
NOVEMBER 2020 DEPARTURE FROM NORMAL PRECIPITATION



Departure from 1981-2010 Normal Rainfall
Calendar Month to Date

Nov 1, 2020 through Nov 30, 2020
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NOVEMBER 2020 PERCENT OF NORMAL PRECIPITATION



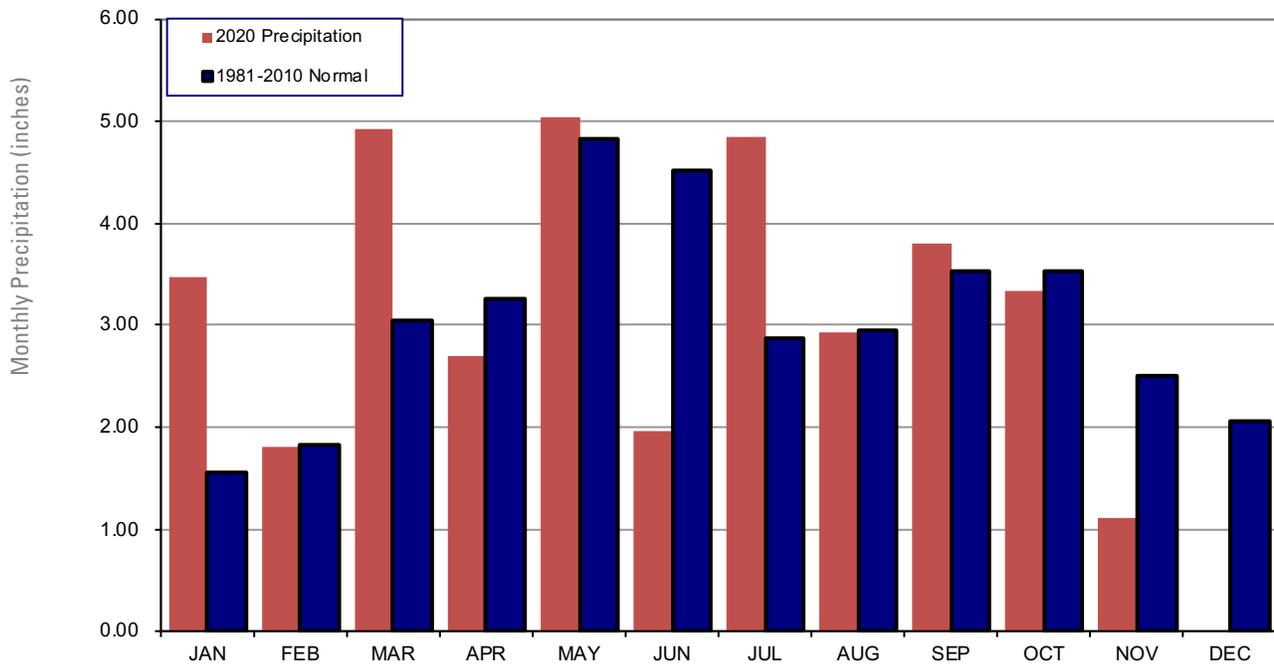
Percent of 1981-2010 Normal Rainfall
Calendar Month to Date

Nov 1, 2020 through Nov 30, 2020
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MESONET MONTHLY SUMMARY FOR NOVEMBER 2020

NAME	MEAN TEMP	HIGH TEMP	LOW TEMP	DAY	DAY	HDD	CDD	TOT PPT	HIGH 24-HR	DAY	NAME	MEAN TEMP	HIGH TEMP	LOW TEMP	DAY	DAY	HDD	CDD	TOT PPT	HIGH 24-HR	DAY
PANHANDLE																					
Arnett	52.3	86	19	24	29	****	****	.24	.14	24	Goodwell	48.3	86	19	14	30	502	2	.32	.18	28
Beaver	49.5	83	19	15	30	467	3	1.08	.70	24	Hooker	47.8	81	18	12	30	517	0	.42	.25	28
Boise City	47.0	84	19	16	30	540	1	.35	.27	28	Kenton	47.5	83	19	17	12	526	2	.42	.38	28
Buffalo	50.5	83	19	19	30	441	5	.83	.62	24	Slapout	50.6	84	19	18	30	433	1	.60	.35	24
Eva	47.2	82	6	15	30	534	0	.26	.16	28											
NORTH CENTRAL																					
Alva	51.2	80	14	18	30	418	4	.61	.29	24	May Ranch	51.0	84	19	19	30	426	4	.52	.20	24
Blackwell	51.6	77	14	22	30	408	5	1.62	1.06	24	Medford	51.2	78	14	19	30	417	3	1.44	.61	24
Breckinridge	51.9	78	14	23	30	396	4	1.47	.74	21	Newkirk	52.0	77	3	20	30	396	5	1.15	.71	24
Cherokee	51.3	80	14	20	30	417	6	.61	.27	21	Red Rock	53.0	78	14	25	13	****	****	1.62	.95	24
Fairview	52.5	82	14	23	30	381	6	1.02	.71	24	Seiling	51.4	81	14	17	30	410	2	.32	.16	21
Freedom	50.9	82	19	17	30	429	6	.38	.26	24	Woodward	51.8	82	19	18	30	401	5	.29	.15	21
Lahoma	51.5	80	14	21	30	407	2	1.57	.95	24											
NORTHEAST																					
Bixby	53.9	80	9	24	30	344	12	1.08	.46	24	Pawnee	53.2	79	3	24	30	363	10	1.90	1.06	24
Burbank	52.3	79	3	23	30	390	9	2.23	1.20	24	Porter	54.3	79	9	26	30	332	10	.88	.37	24
Copan	52.0	79	3	25	30	394	6	2.33	1.33	21	Pryor	52.4	78	9	22	30	385	6	2.43	.73	14
Foraker	52.4	79	3	22	30	386	9	2.63	1.56	24	Skiatook	54.1	78	3	24	30	336	9	2.03	.81	24
Inola	52.5	80	9	22	30	381	7	1.73	.51	24	Talala	52.2	78	9	21	30	388	6	2.21	.87	21
Jay	52.8	78	9	22	30	374	9	2.42	1.01	21	Tulsa	54.4	78	9	26	30	329	12	2.18	.77	24
Miami	52.2	78	9	24	30	394	10	3.44	1.36	21	Vinita	51.4	79	9	23	30	414	6	2.56	1.20	21
Nowata	51.2	77	9	21	30	421	6	2.79	1.31	21	Wynona	53.1	79	3	24	30	368	9	1.75	.79	21
WEST CENTRAL																					
Bessie	52.9	82	14	22	30	366	2	1.27	.65	24	Erick	52.1	83	19	19	30	390	3	.53	.20	22
Butler	52.4	82	14	18	30	384	5	1.31	1.00	24	Putnam	51.6	80	14	20	30	402	0	1.41	1.11	24
Camargo	51.3	81	14	25	28	****	****	.25	.12	24	Watonga	52.3	80	14	23	30	382	1	.98	.76	24
Cheyenne	52.6	81	19	23	30	374	1	.60	.38	24	Weatherford	52.1	81	14	18	30	386	0	.66	.51	24
Elk City	52.7	81	14	23	30	369	0	.52	.22	24											
CENTRAL																					
Acme	54.7	81	14	24	30	315	7	.86	.39	24	Norman	54.7	80	14	24	30	316	7	1.26	.71	22
Bristow	53.2	79	14	20	30	368	13	.86	.40	24	Oilton	52.7	79	14	21	30	382	12	1.08	.65	24
Lake Carl Blac	51.6	79	14	23	30	409	7	1.06	.92	24	OKC East	54.1	79	14	27	30	336	9	.42	.23	24
Chandler	54.7	79	14	23	30	323	13	.53	.35	24	Okemah	54.0	78	14	22	30	340	9	.62	.40	24
Chickasha	53.4	81	14	25	30	353	5	.90	.56	22	Perkins	53.8	79	14	22	30	347	12	.78	.53	24
El Reno	52.0	80	14	18	30	391	0	.52	.35	24	Seminole	55.0	80	14	27	30	313	14	.82	.41	22
Guthrie	54.3	79	14	22	30	329	9	.58	.43	24	Shawnee	54.4	78	14	25	30	325	8	.70	.40	24
Kingfisher	52.4	80	14	24	30	383	6	.52	.28	24	Spencer	55.0	79	14	24	30	308	9	.58	.37	24
Marena	53.5	79	14	21	30	351	7	.81	.72	24	Stillwater	52.8	79	14	26	30	375	10	.83	.62	24
Minco	53.3	79	14	22	30	351	0	.76	.37	22	Washington	54.7	80	14	26	30	314	5	1.09	.50	22
Marshall	52.6	79	14	23	30	378	5	.72	.62	24	Yukon	53.7	79	14	24	30	343	3	.79	.37	24
EAST CENTRAL																					
Cookson	53.4	78	9	22	30	358	10	1.58	.92	24	Sallisaw	53.7	80	9	23	30	349	10	1.22	.71	24
Eufaula	55.6	79	14	28	30	296	14	1.25	.70	24	Stigler	53.9	79	9	25	30	343	9	1.78	1.09	24
Haskell	53.0	79	14	23	30	367	7	.81	.48	24	Stuart	55.7	80	14	27	30	295	15	1.78	1.08	24
Hectorville	55.4	79	14	26	30	304	15	.98	.40	24	Tahlequah	53.1	77	9	21	30	363	8	1.63	.59	14
Holdenville	55.4	79	14	26	30	299	11	1.81	.98	22	Webbers Falls	54.1	81	9	23	30	338	10	1.12	.61	24
McAlester	55.1	80	14	23	30	313	14	2.21	1.35	24	Westville	53.4	76	9	24	30	354	7	2.81	1.07	14
Okmulgee	53.1	79	9	21	30	371	13	.99	.75	24											
SOUTHWEST																					
Altus	54.3	85	14	23	30	326	4	.42	.27	28	Hollis	54.1	84	14	20	30	333	5	.30	.23	28
Apache	53.5	80	14	21	30	347	2	.90	.49	22	Mangum	****	***	***	***	***	****	****	.37	.18	28
Fort Cobb	53.2	82	14	21	30	356	1	.92	.62	22	Medicine Park	55.3	81	14	27	30	291	1	.73	.41	24
Grandfield	55.2	83	14	23	30	296	3	.35	.20	28	Tipton	54.7	83	14	24	30	314	5	.43	.20	28
Hinton	51.8	80	14	20	30	****	****	.32	.21	24	Walters	55.4	84	14	24	30	294	5	.46	.15	24
Hobart	53.1	83	14	20	30	359	2	.54	.39	22											
SOUTH CENTRAL																					
Ada	55.1	81	14	28	30	311	14	1.07	.46	22	Lane	55.0	81	9	22	30	312	11	1.28	.38	22
Ardmore	56.7	82	14	30	30	261	11	.76	.30	24	Madill	56.8	82	14	28	30	259	14	1.10	.58	24
Burneyville	56.1	84	14	22	30	280	13	.70	.32	28	Newport	56.8	83	14	26	30	257	10	1.11	.75	24
Byars	56.3	80	14	26	30	272	10	1.03	.65	22	Pauls Valley	****	***	***	***	***	****	****	.56	.31	22
Centrahoma	55.3	81	14	22	30	307	16	.88	.42	24	Ringling	57.3	83	14	34	11	****	****	.63	.30	28
Durant	57.4	81	14	29	30	245	16	2.38	.93	12	Sulphur	55.3	81	14	22	30	304	13	1.33	.83	24
Fittstown	54.9	79	14	27	30	311	9	1.29	.85	24	Tishomingo	55.2	81	14	23	30	307	12	1.10	.45	24
Ketchum Ranch	56.5	81	14	33	16	****	****	.81	.27	24	Waurika	56.1	84	14	26	30	275	8	.75	.45	28
SOUTHEAST																					
Antlers	54.3	80	14	21	30	331	10	2.21	1.09	24	Mt Herman	54.3	75	14	23	30	328	8	2.18	.77	24
Broken Bow	54.4	77	9	25	30	324	6	1.43	.61	24	Talihina	54.5	80	9	21	30	329	15	1.62	.67	24
Clayton	54.5	78	14	23	30	328	14	2.16	.93	24	Valliant	55.5	81	14	23	30	296	12	1.49	.68	29
Cloudy	54.6	78	14	23	30	321	8	2.17	1.05	24	Wilburton	54.4	80	9	21	30	334	15	1.89	1.07	24
Hugo	56.3	80	9	29	30	273	12	1.59	.63	24	Wister	52.4	78	9	20	30	381	4	1.53	.84	24
Idabel	55.4	80	14	24	30	299	11	.90	.40	29											

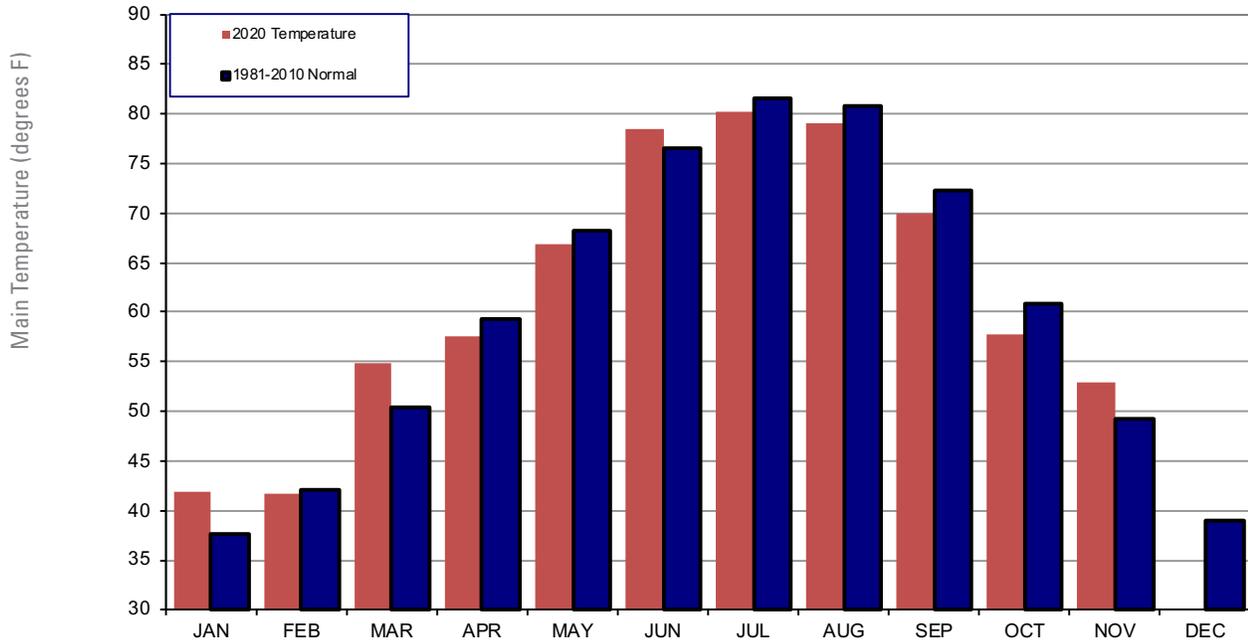
2020 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



November 2020 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Nov-19
Panhandle	0.54	-0.29	62nd Driest	4.08 (1909)	0.00 (1921)	0.48
North Central	0.92	-0.81	53rd Driest	6.61 (1964)	0.00 (1910)	0.99
Northeast	2.16	-0.99	63rd Wettest	7.04 (1992)	0.05 (1910)	2.99
West Central	0.91	-0.58	58th Driest	6.96 (1909)	0.00 (1949)	1.31
Central	0.78	-1.63	34th Driest	6.56 (1992)	0.01 (1955)	2.3
East Central	1.54	-2.34	32nd Driest	9.86 (1946)	0.32 (1910)	4.41
Southwest	0.52	-1.19	34th Driest	6.63 (2004)	0.00 (1949)	1.33
South Central	1.1	-1.79	38th Driest	8.87 (1902)	0.07 (1949)	2.96
Southeast	1.74	-2.91	31st Driest	12.58 (2015)	0.37 (2017)	4.51
Statewide	1.12	-1.39	37th Driest	6.04 (2015)	0.13 (1949)	2.34

2020 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



November 2020 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Nov-19 (F)
Panhandle	48.8	3.8	10th Warmest	51.5 (1999)	35.5 (1929)	42.5
North Central	51.5	4.4	7th Warmest	54.5 (1999)	39.0 (1929)	44.1
Northeast	52.8	3.9	10th Warmest	56.4 (1999)	41.1 (1929)	45.2
West Central	52.1	4.1	9th Warmest	54.8 (1999)	39.4 (1929)	44.9
Central	53.7	3.9	12th Warmest	57.1 (1999)	42.0 (1929)	47.3
East Central	54.2	3.4	15th Warmest	58.9 (1909)	43.3 (1929)	47.6
Southwest	53.9	3.4	13th Warmest	56.7 (1999)	42.4 (1929)	47.4
South Central	55.8	3.5	13th Warmest	58.6 (1999)	43.5 (1929)	48.5
Southeast	54.6	3.0	22nd Warmest	58.3 (1909)	43.7 (1929)	47.8
Statewide	53.0	3.7	10th Warmest	56.1 (1999)	41.1 (1929)	46.1

MESONET EXTREMES FOR NOVEMBER 2020

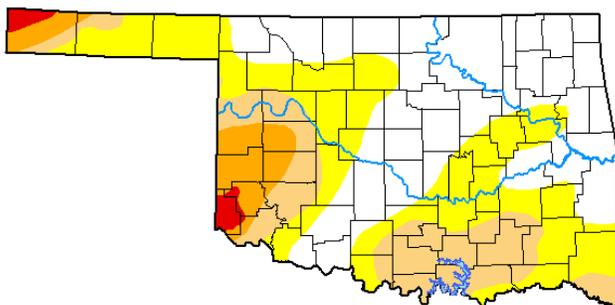
Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	86	19th	Goodwell	12	30th	Hooker	1.08	Beaver	0.7	24th	Beaver
North Central	84	19th	May Ranch	17	30th	Seiling	1.62	Blackwell	1.06	24th	Blackwell
Northeast	80	9th	Bixby	21	30th	Talala	3.44	Miami	1.56	24th	Foraker
West Central	83	19th	Erick	18	30th	Butler	1.41	Putnam	1.11	24th	Putnam
Central	81	14th	Chickasha	18	30th	El Reno	1.26	Norman	0.92	24th	Lake Carl Blackwell
East Central	81	9th	Webbers Falls	21	30th	Okmulgee	2.81	Westville	1.35	24th	McAlester
Southwest	85	14th	Altus	20	30th	Hollis	0.92	Fort Cobb	0.62	22nd	Fort Cobb
South Central	84	14th	Burneyville	22	30th	Sulphur	2.38	Durant	0.93	12th	Durant
Southeast	81	14th	Valliant	20	30th	Wister	2.21	Antlers	1.09	24th	Antlers
Statewide	86	19th	Goodwell	12	30th	Hooker	3.44	Miami	1.56	24th	Foraker

Oklahoma Climate Divisions



U.S. Drought Monitor Oklahoma

November 24, 2020
(Released Wednesday, Nov. 25, 2020)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	42.62	57.38	25.13	7.78	1.47	0.00
Last Week 11-17-2020	46.50	53.50	22.76	7.70	1.44	0.00
3 Months Ago 08-25-2020	62.46	37.54	20.25	12.32	1.33	0.00
Start of Calendar Year 12-31-2019	76.45	23.55	10.47	3.64	0.00	0.00
Start of Water Year 09-29-2020	66.79	33.21	17.71	11.97	1.55	0.00
One Year Ago 11-26-2019	76.05	23.95	12.58	3.67	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:
Richard Heim
NCEI/NOAA



droughtmonitor.unl.edu

INTERPRETATION INFORMATION

MEAN DAILY TEMPERATURE: Calculated from an average of the daily maximum and minimum temperatures. Daily averages are summed for each day, and then divided by the number of valid data points – typically the number of days in the month. Although this November differ from the “true” daily average, it is consistent with historical methods of observation and comparable to the normals and extremes for stations and regions of the state.

DEGREE DAYS: Degree Days are calculated each day of the month for which there is a temperature report and the mean temperature for the day is less than (Heating Degree Days) or greater than (Cooling Degree Days) 65 degrees. Daily values are summed to arrive at a monthly total. HDD/CDD are qualitative measures of how much heating/cooling was required to maintain a comfortable indoor temperature. Missing observations November result in an artificially high or low value.

ADDITIONAL RESOURCES

SUNRISE / SUNSET TABLES

U.S. Naval Observatory: <http://aa.usno.navy.mil/data>

SEVERE STORM REPORTS

Storm Prediction Center: <http://spc.noaa.gov/climo/>

National Centers for Environmental Information:
<https://www.ncdc.noaa.gov/stormevents/>

SEASONAL OUTLOOKS

Climate Prediction Center:
http://www.cpc.ncep.noaa.gov/products/OUTLOOKS_index.shtml

CLIMATE CALENDARS AND OTHER LOCAL WEATHER AND CLIMATE INFORMATION

Oklahoma Climatological Survey:
<http://climate.mesonet.org> or <http://climate.ok.gov/>



Oklahoma Climatological Survey is the State Climate Office for Oklahoma

Dr. Kevin Kloesel Director
Dr. Chris Fiebrich Associate Director

EDITOR

Gary D. McManus State Climatologist

CONTENT AND LAYOUT ASSISTANT

Andrea Dawn Melvin Outreach Coordinator

For more information, contact:
Oklahoma Climatological Survey
The University of Oklahoma
120 David L. Boren Blvd., Suite 2900
Norman, OK 73072-7305

TEL: 405-325-2541

FAX: 405-325-7282

E-MAIL: ocs@ou.edu

WEBSITE: <http://climate.ok.gov>